PSR 10A NEO SPEAKER

PROFESSIONAL SOUND REINFORCEMENT

Order Code: SPEA31C

USER MANUAL

ENGLISH

www.prolight.co.uk

WARNING

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOUR INITIAL START-UP!

Unpacking Instructions

Immediately upon receiving this product, carefully unpack the carton and check the contents to ensure that all the parts are present, and have been received in good condition. Notify the dealer immediately and retain the packaging material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packaging materials. In the event that a product must be returned to the supplier, it is important that the equipment is returned in the original carton and packaging.

CAUTION!

Keep this equipment away from rain, moisture and liquids.

SAFETY INSTRUCTIONS

Every person involved with the installation, operation & maintenance of this equipment should:

- Be competent
- Follow the instructions of this manual

DANGER OF BURNING!

The materials used in this speaker system are easily flammable. If B1 is required at the installation place, the surface must be treated with an appropriate fire retardant at regular intervals.

DANGER TO LIFE!

A falling speaker system can cause deadly accidents. All safety instructions given in this manual must be observed.

CAUTION! TAKE CARE USING THIS EQUIPMENT!
HIGH VOLTAGE-RISK OF ELECTRIC SHOCK!!

IMPORTANT:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorised modification to the equipment.

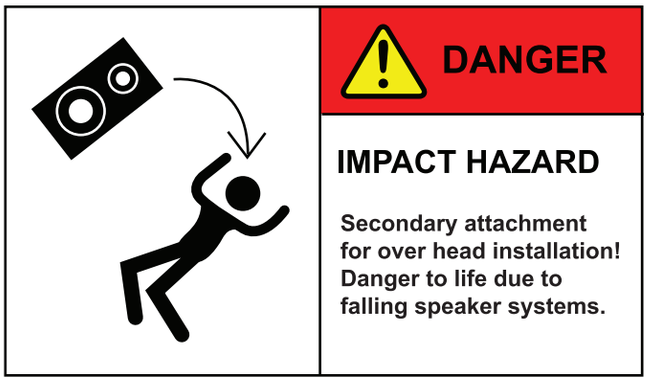
- Never let the power-cable come into contact with other cables. Handle the power-cable and all mains voltage connections with particular caution!
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Do not connect this equipment to a dimmer-pack.
- Do not switch the equipment on and off in short intervals, as this will reduce the system's life.
- Never remove warning or informative labels from the equipment.
- Do not open the equipment and do not modify the equipment.
- Always disconnect the power from the mains when equipment is not in use or before cleaning! Only handle the power-cable by the plug. Never pull out the plug by pulling the power-cable.
- Make sure that the available voltage is between 220v/240v.
- Make sure that the power-cable is never crimped or damaged. Check the equipment and the power-cable periodically.
- If the equipment is dropped or damaged, disconnect the mains power supply immediately. Have a qualified engineer inspect the equipment before operating again.
- If the equipment has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation might damage the equipment. Leave the equipment switched off until it has reached room temperature.
- Only use the equipment indoors.
- Do not expose to flammable sources, liquids or gases.
- If your product fails to function correctly, discontinue use immediately. Pack the unit securely (preferably in the original packing material), and return it to your Prolight dealer for service.
- Only use fuses of same type and rating.
- Repairs and servicing must only be carried out by a qualified technician. THIS UNIT CONTAINS NO USER SERVICEABLE PARTS.
- WARRANTY; One year from date of purchase.

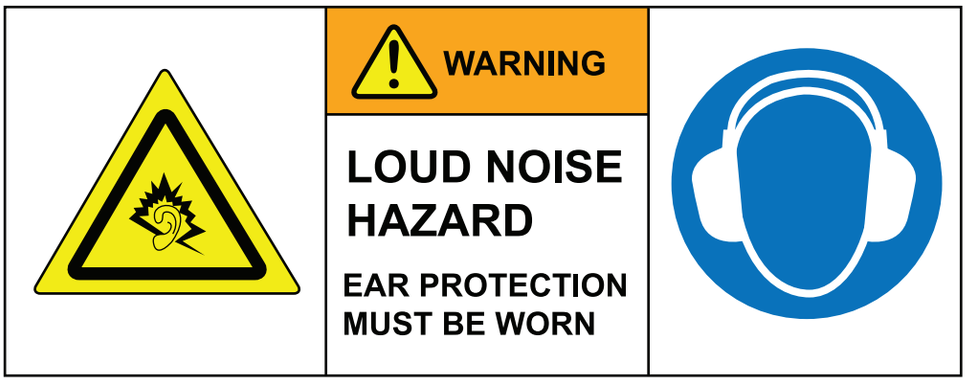
OPERATING DETERMINATIONS

If this equipment is operated in any other way, than those described in this manual, the product may suffer damage and the warranty becomes void.

Do not endanger your own safety and the safety of others!
Incorrect installation or use can cause serious damage to people and property.

Please note that speaker systems can move due to bass beats and vibrations. Furthermore, unintended pushing on the speakers present a further risk. The speaker system must always be secured against moving or the respective area has to be blocked.





The given maximum power of the speaker system describes short term peaks the system can handle as a maximum. The corresponding RMS power is - as of all comparable systems (also from other manufactures) - significantly lower. The maximum power of the speaker system must never be exceeded. When operating the speaker system, please make sure that the system always sounds clear. When distortion can be heard, either the amplifier or the loud speaker is being overdriven. Overloads can quickly lead to amplifier or speaker damage. In order to avoid damage, please reduce the volume immediately when distortion can be heard. When speaker systems are damaged by overdriving, the guarantee becomes void.

The ambient temperature must always be between -5˚ C and +45˚ C. Keep away from direct sunlight (particularly in cars) and from heaters.

The relative humidity must not exceed 50% with an ambient temperature of +45˚ C.

This speaker system must only be installed at a solid, horizontal, anti-slip, vibration and oscillation free fire resistant location.

Please note: When using this speaker system in public or industrial areas, a series of safety instructions have to be followed that this manual can only give in part. The operator must therefore inform himself on the current safety regulations.

Before installing the system, make sure that the installation area can hold a minimum point load of 5 times the systems weight (e.g. weight 20kg - point load 100kg).

The speaker system must never be installed higher than 100cm with out a secondary attachment.

For over head installations (mounting height >100cm), always fix the speaker system with an appropriate safety cable.

The installation area of the speaker system has to be built and constructed in a way that it can hold 10 times the weight of the speaker for 1 hour without any deformation.

DANGER TO LIFE!

The subwoofer must never be suspended - Danger to life due to falling speaker systems.

DANGER TO LIFE!

The top speaker must only be suspended by experienced and trained persons - Danger to life due to falling speakers systems.

The top speaker system can be installed on top of a subwoofer (satellite system), on a speaker stand or an appropriate wall mounting. The carrying capacity of the extension pole, the speaker stand, or wall mounting bracket must never be exceeded.

The PSR Series must always be provided with enough stability. The speaker(S) base surface must always be sufficiently dimensioned in relation to the other speaker(s) in order to prevent the cabinets tilting over.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the system.

Please note: W Audio cannot be made liable for damages caused by incorrect installations and excessive noise levels.

Features:

• High Impact Moulded Polypropylene Enclosure
• 1.4” Voice Coil, 1 inch Exit Aluminium Compression Driver
• 5 Integral Suspension Points
• Complete Mounting Solutions
• Smooth Response With High Power Handling Capacity
• 90 x 60 degree Coverage Pattern
• Ideal for entertainers, mobile discos and small bands.
• Constant directivity horn.
• Balanced frequency range with high sound pressure levels.
• Very high durability.
• Stand adaptor for speaker stand installation etc.

Unpacking and transportation:
The PSR Series are packed in single cartons except from the PSR-8 (boxed in 2s). Unpack the units and examine them for transport damages.

Overview:

1, Mic volume controls
With this control you can set the desired volume level of the microphone.

2, Volume control
With this control you can set the desired volume of the line input.

3, Treble control
With this control you can add or decrease the speaker high frequency. Adding high frequency can improve the intelligibility.

4, Bass control
With this control you can add or decrease bass to the music output. By adding bass you can add warmth to your music. Decreasing bass can improve the intelligibility of the spoken word.

5, Mic inputs
Use these inputs to connect your microphones.

6, Line input
Use this input to connect your sound source. These inputs have to be fed with a music signal at line level (C/D, iPod, Laptop etc).

7, Mix output
Use this output to connect to additional PSR A Series speakers.

8, Master volume control
With this control you can set the desired output level of all the combined input sources.

9, Mains socket
Connection to the mains circuit by a standard IEC type power cable.

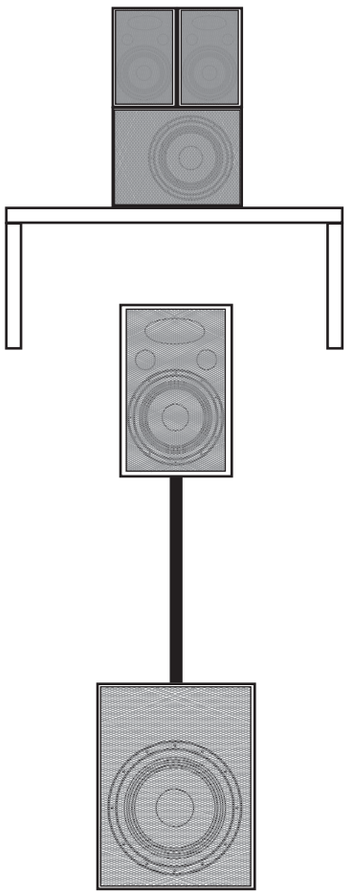
10, Hi limit LED
This LED illuminates when the high frequency amplifier is being over driven.

11, Low limit LED
This illuminates when the low frequency amplifier is being over driven

12, Power LED
This illuminates when the power to the speaker is switched on.

Installation

Stacking
The PSR speakers may only be installed on top of another speaker system if both systems are clamped up to each other via appropriate clamping belts and protected against tilting over.



Satellite System

The satellite system must always provide enough stability. The subwoofer's base surface must always be sufficiently dimensioned in relation to the top speaker in order to prevent tilting over.

The subwoofer and the top speaker must only be connected via an appropriate extension pole and stand adaptor.

The carrying capacity of the distance tube must never be exceeded.

When choosing the installation location, please make sure no person can enter the area below the system! Make sure that the respective area is blocked.

An unintended movement of the load has to be avoided - also in case of fire!

The system must never be moved before the top speaker has been removed.

Installation on a Speaker Stand

The speaker system may only be installed on a speaker stand if the original speaker system is equipped with an appropriate stand adaptor.

Stands or satellite systems must only be installed on a plane area with a maximum inclination angle of 5˚.

CAUTION: Speaker systems installed under the influence of horizontal forces, e.g. wind, can be impaired. This is why additional safety measures like attaching ballast weights have to be taken.

If inclined tension cables or prolonged outriggers are used. the area of danger has to marked or blocked.

Before lifting or lowering the telescopic tubes, you must always block a safety area around the stand or satellite system. This safety area must have a diameter of 1.5 times the maximum height.

Lifted telescopic tubes always have to be secured with a secondary securing attachment.

The total weight of the installation (total weight of system including individual parts) must never exceed the maximum load of the installation area.

Unintended movement of the load has to be avoided - also in case of fire!

Loosen the fixing screws of the legs, pull the legs out until the cross struts are at a 90˚ angle to the legs. Tighten the fixing screws of the legs.

Installation Of The Speaker System

CAUTION: The loads have to be installed in a balanced way.

CAUTION: The carrying capacity of the stand or speaker stand must never be exceeded.

Overhead Installation

If the speaker system is to be installed with a mounting height of more than 1 meter (e.g. on a stage or framework), the speaker system must always be secured with an appropriate secondary securing attachment.

The installation must always be secured with a secondary safety attachment. e.g. an appropriate catch net. The secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, derigging, or servicing the speaker system standing in the area below the installation place, on bridges or other endangered areas are forbidden.

The operator has to make sure that the safety data is approved by an expert before operation for the first time and after any changes are made.

The operator has to make sure that the safety data is approved by an expert after every four years in the course of an acceptance test.

The operator has to make sure that the safety installation data is approved by a skilled person once a year.

Procedure
The speaker system should be installed outside areas where persons may walk by or seated.

IMPORTANT! OVER HEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including (but not limited to) calculating working limits, installation materials used, and periodic safety inspection of all installation materials and the speaker system. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger. Improper installation can result in bodily injury and damage to your property.

The speaker system has to be installed out of the reach of people.

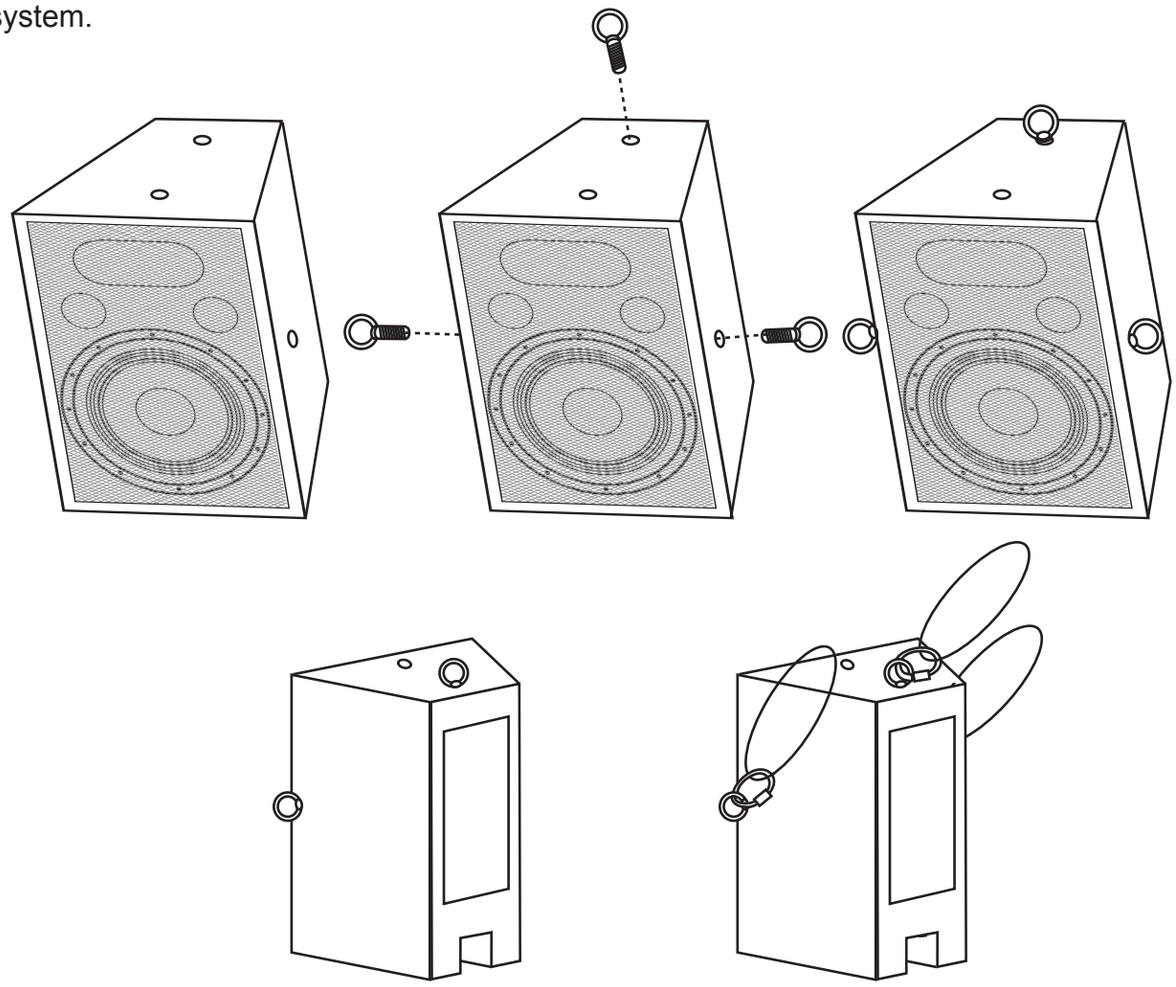
CAUTION: Speaker systems in overhead installations may cause severe injuries when falling! If you have doubts concerning the safety of a possible installation, do not install the speaker system!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the speaker systems weight.

Secondary Attachment

Please note: The Speaker system must always be secured with three appropriate eye bolts and three appropriate safety ropes.

The eyelets and the safety ropes must always hold at least 12 times the weight of the speaker system.



Please note: Before installing the eye bolts, make sure that the thread is is always in perfect condition and free from dirt.

Install the eye bolts in the threaded holes on the speaker system. The eye bolts must be tightened until the stop position, hand tight with out any tools.

Insert the quick links of the safety ropes in the eye bolts of the speaker system. Pull the safety ropes over a safe fixing spot. Insert the end into the quick link and tighten the safety screw.

The maximum drop distance must never exceed 20cm.

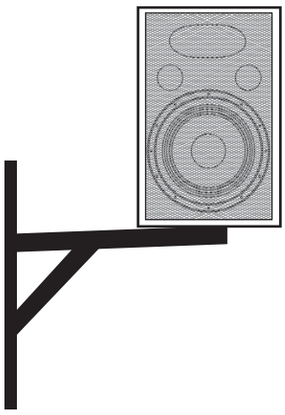
A safety rope which has already held the strain of a fall and is defective must not be used again.

DANGER TO LIFE!

Before putting the speaker system into operation for the first time, the installation has to be approved by an expert!

Wall Installation

The speaker system can only be installed on a wall, if the original speaker system is equipped with an appropriate mounting point.



Before attaching the speaker system, make sure that the installation area can hold a minimum point load of 10 times the installations weight.
(e.g. 13Kgs - 130Kgs point load).

The durability of the installation depends very much on the material used at the installation area (building material), such as wood, concrete and brick etc. This is why the fixing material must be chosen to suit the wall material. Always ask a specialist for the correct plug/screw combination indicating the maximum load and building material.

Suspended Installation

DANGER TO LIFE!

The subwoofer must never be suspended! Danger to life due to falling speaker systems.

DANGER TO LIFE!

The top speaker must only be suspended by an experienced and trained persons! Danger to life due to falling speakers.

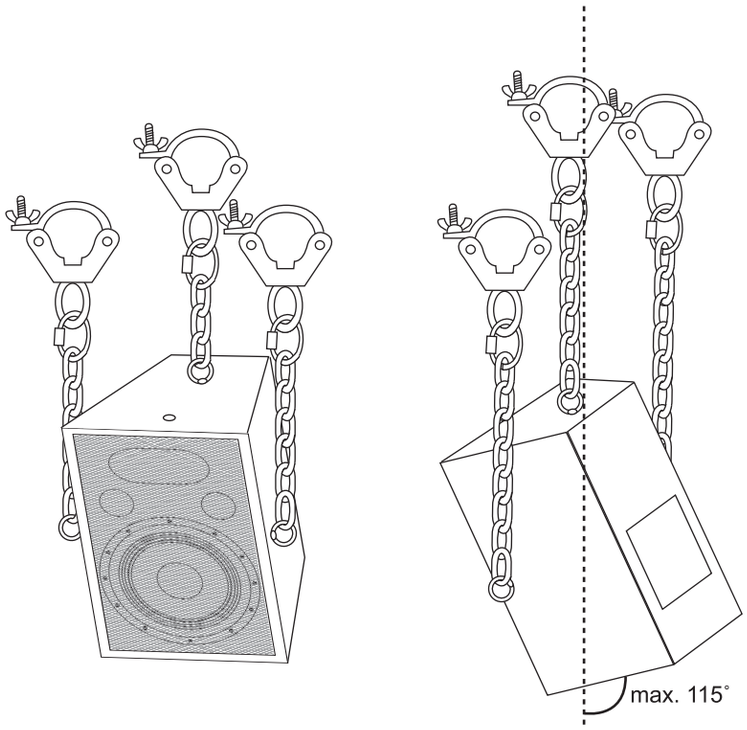
Suspended Installation

The speaker system has to be installed out of the reach of people.

The installation material must always hold at lease 12 times the weight of the speaker system.

Please note: The installation must always be carried out via two eye bolts on top of the and one at the rear. The speaker system can be tilted in a maximum vertical angle of 115˚ or maximum horizontal angle of 25˚.

Suspended Installation (cont...)



Procedure

Step 1: Remove the plastic bolt covers.
Step 2: Install the eye bolts in the threaded holes on the speaker system.
The eye bolts must be tightened until the stop position, hand tight without any tools.
Step 3: Install the bolt on chain link in the first and last links and tighten the fixation screw.
Step 4: Install the chain with the bolt on chain link at the installation eyelet of the ring coupler and tighten the fixation bolt.
Step 5: Install the chain with the lower bolt on chain link at the eye bolt on the speaker system and tighten the fixation bolt.
Step 6: install the speaker system on the trussing.

PSR-10A Neo Specifications:

Output power: 250W
Freq. Range (-10dB): .....60Hz - 20kHz
Max Calculated SPL: 122dB
Crossover Frequency: 1.8kHz
Loop/Mix out: .....XLR/M, balanced
Horizontal Coverage: .....80 degrees
Vertical Coverage: .....60 degrees
Power supply: 240V
Dimensions: .....557 x 332 x 313mm
Weight: 14Kgs